AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration P. O. Box 7599 Loveland, Colorado 80537-0599

II. CLAIM AMENDMENTS

1. (Currently Amended) A control unit adapted configured for controlling a laser unit, wherein:

the laser unit comprises a laser gain medium and an external cavity having a reflecting dispersion device,

the laser gain medium is adapted configured for providing a first beam towards the reflecting dispersion device,

the reflecting dispersion device is <u>adapted</u>configured for receiving the first beam and reflecting a beam, having a reflection angle dependent on the wavelength, towards the laser gain medium, and

the laser gain medium is adapted configured for providing a second beam in another direction than the first beam;

the control unit comprising:

an angle unit adapted configured for providing an angular variation signal indicative of an angular variation of the second beam, and

an analysis unit adapted configured for receiving the angular variation signal and controlling the reflection angle of the reflecting dispersion device dependent on the angular variation signal.

- 2. (Currently Amended) The control unit of claim 1, wherein the angle unit comprises an angle detection unit adapted configured for detecting the angular variation of the second beam and deriving the angular variation signal in correspondence with the detected angular variation.
- 3. (Currently Amended) The control unit of claim 2, wherein the angle detection unit comprises a position dependent detector adapted configured for receiving the second beam, or a part thereof, and detecting the angular variation from a lateral variation of the received beam detected along the position dependent detector.

ATTORNEY DOCKET NO. 20030351-02

AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration P. O. Box 7599

Loveland, Colorado 80537-0599

4. (Original) The control unit of claim 2, wherein the angle detection unit comprises two power detectors each receiving a portion of the second beam, wherein the ratio of the two

portions depends on the angular variation of the second beam.

5. (Currently Amended) The control unit of claim 1, further comprising:

a beam splitter adapted configured for receiving and splitting the second beam into

one portion to be provided to the angle unit and into another portion to be provided to

a coupling unit adapted configured for coupling out the received portion of the second

beam, preferably into at least one of an optical fiber and optical signal carrier.

6. (Currently Amended) The control unit of claim 1, further comprising a power detector

adapted configured for determining a power value indicative of the total power of the second

beam.

7. (Currently Amended) The control unit of claim 6, wherein the angle unit is

adapted configured to determine the angular variation signal based on power value indicative

of the power and the determined power value indicative of the total power of the second

beam.

8. (Currently Amended) The control unit of claim 1, wherein the analysis unit is

adapted configured for controlling the reflection angle of the reflecting dispersion device in

order to provide at least one of the following:

keep the angular variation substantially constant,

keep the angular variation substantially constant with respect to a reference angle,

and preferably substantially zero.

keep the angular variation substantially zero with respect to a reference angle.

9. (Currently Amended) The control unit of claim 1, wherein the analysis unit is

adapted configured for controlling at least one of a rotation, a shift, and a lateral shift of the

reflecting dispersion device.

10. (Currently Amended) The control unit of claim 1, further comprising:

3

AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration P. O. Box 7599 Loveland, Colorado 80537-0599

a modulator adapted configured for modulating around a center value of the reflection angle of the reflecting dispersion device with a modulation signal,—preferably modulating around a center value,

wherein the analysis unit is adapted configured for deriving an error signal by analyzing the modulated angular variation signal in conjunction with the modulation signal, and for controlling the reflection angle of the reflecting dispersion device dependent on the derived error signal.

11. (Currently Amended) The control unit of claim 1, further comprising:

a second angular detector adapted configured for detecting a second angular error perpendicular to the first, and

anwherein the analysis unit adapted configured for receiving the second angular variation signal and controlling the second reflection angle perpendicular to the first reflection angle.

12. (Currently Amended) A laser unit comprising a laser gain medium and an external cavity having a reflecting dispersion device, wherein:

the laser gain medium is adapted configured for providing a first beam towards the reflecting dispersion device,

the reflecting dispersion device is <u>adapted</u>configured for receiving the first beam and reflecting a beam, having a reflection angle dependent on the wavelength, towards the laser gain medium, and

the laser gain medium is <u>adapted</u> for providing a second beam in another direction than the first beam;

the laser unit further comprises a control unit of claim 1 adapted configured for controlling the laser unit.

13. (Currently Amended) The laser unit of claim 13 claim 12, comprising one or more of the following features:

the second beam represents an output beam of the laser unit,

AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration P. O. Box 7599 Loveland, Colorado 80537-0599

the laser gain medium comprises at least one of: an amplifying waveguide, a doped crystal or glass, a gas cell, a dye cell,

the reflecting dispersion device comprises at least one of: a grating, a dispersion prism, a reflecting device such as a mirror or a dihedral prism.

14. (Currently Amended) A method for controlling a laser unit, wherein:

the laser unit comprises a laser gain medium and an external cavity having a reflecting dispersion device,

the laser gain medium is adapted configured for providing a first beam towards the reflecting dispersion device,

the reflecting dispersion device is <u>adapted configured</u> for receiving the first beam and reflecting a beam, having a reflection angle dependent on the wavelength, towards the laser gain medium, and

the laser gain medium is adapted configured for providing a second beam in another direction than the first beam;

the method comprising the steps of:

(a) providing an angular variation signal indicative of an angular variation of the second beam, and

(b) controlling the reflection angle of the reflecting dispersion device dependent on the angular variation signal.

15. (Currently Amended) A software program or product, preferably stored on a data carrierembodied on a computer readable medium, for executing the method of claim 14 when run on a data processing system-such as a computer.